

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An active matrix electroluminescent display device comprising an array of display pixels arranged in rows and columns, each pixel comprising:

an electroluminescent (EL) display element;

a drive transistor for driving a current through the display element;

means for directly interrupting the drive of current through the display element via a direct interrupt signal, said direct interruption means being provided in series with the electroluminescent display element; and

row driver circuitry for generating control voltages to be applied to the pixels in each row in sequence including a drive voltage as input to ~~[[for]]~~ the interrupting means,

wherein the row driver circuitry comprises a shift register arrangement and logic arrangement for generating the drive voltage for the interrupting means, the drive voltage for the interrupting means including a long emission time pulse for controlling the output of the display element, the long emission time pulse having a duration which can be varied up to substantially the full field period less the address period, and wherein the timing of the end of the long emission time pulse corresponds to ~~corresponding to~~ the timing of ~~[[an]]~~ the direct interrupt signal generated by the interrupting means for controlling the display element illumination time ~~for interrupting~~,

wherein the signal or signals propagated through the shift register arrangement control the pulse duration.

2. (Previously Presented) A device as claimed in claim 1, wherein the shift register arrangement and logic arrangement comprises first and second shift register devices, each having a pulse propagating through them, and logic means for deriving a signal having a pulse

with duration derived from the difference in timing of the pulses propagating through the first and second shift register devices.

3. (Previously Presented) A device as claimed in claim 1, wherein the pulse propagating in each shift register device has a duration corresponding the line time of the display.

4. (Previously Presented) A device as claimed in claim 1, wherein the logic means comprises a transmission gate which transmits a low pulse in response to a pulse on one of the shift register devices and transmits a high pulse in response to a pulse on the other one of the shift register devices.

5. (Previously Presented) A device as claimed in claim 4, wherein the logic means further comprises a memory cell for maintaining a constant output between pulses received from the transmission gate.

6. (Previously Presented) A device as claimed in claim 1, wherein the shift register arrangement and logic arrangement comprises first and second shift register devices, each having a pulse propagating through them, and logic means for deriving a signal having a pulse with duration derived from the duration of the pulse in one of the first and second shift register devices.

7. (Previously Presented) A device as claimed in claim 6, wherein the pulse propagating in one shift register device has a duration corresponding to the line time of the display and the pulse propagating in the other shift register device has a duration for controlling the display element illumination period.

8. (Previously Presented) A device as claimed in claim 1, wherein the shift register arrangement and logic arrangement comprises a shift register device, having a pulse propagating through it having a duration dependent on the desired illumination time of the display element, and logic means for deriving from the shift register device a pulse having a duration corresponding to the line time of the display.

9. (Previously Presented) A device as claimed in claim 8, wherein the logic means for deriving from the shift register device a pulse having a duration corresponding to the line time of the display comprises a combination element for combining the pulse at the output of one shift register element (n) for one row with the pulse at the output of another shift register element (n+1) for an adjacent row.

10. (Previously Presented) A device as claimed in claim 1, wherein a first pulse from the shift register arrangement and logic arrangement is combined with a first template control signal or signals (A1, A2) to provide a first control signal or signals (A1r,A2r) for the addressing of the pixel, and a second pulse from the shift register arrangement and logic arrangement is combined with a second template control signal (A3) to provide the drive voltage (A3r) for the interrupting means both during the addressing of the pixel and during subsequent driving of the pixel.

11. (Original) A device as claimed in claim 10, wherein the first pulse has duration equal to the line time.

12. (Previously Presented) A device as claimed in claim 10, wherein the second pulse has duration selected to control the display element illumination time.

13. (Previously Presented) A device as claimed in claim 1, wherein each pixel comprises drive transistor threshold compensation circuitry.

14. (Previously Presented) A device as claimed in claim 13, wherein the drive transistor threshold compensation circuitry comprises first and second capacitors connected in series between the gate and source of the drive transistor, a data input to the pixel being provided to the junction between the first and second capacitors thereby to charge the first capacitor to a voltage derived from the pixel data voltage, and a voltage derived from the drive transistor threshold voltage being stored on the second capacitor.

15. (Previously Presented) A device as claimed in claim 13, wherein the drive transistor, the electroluminescent display element and means for interrupting the drive of current through the display element are connected in series between a power supply line and a common potential line.

16. (Previously Presented) A device as claimed in claim 15, wherein the means for interrupting comprises a transistor.

17. (Currently Amended) A method of driving an active matrix electroluminescent display device comprising an array of display pixels arranged in rows and columns, in which each pixel comprises an electroluminescent (EL) display element, a drive transistor for driving a current through the display element and means for directly interrupting the drive of current through the display element provided in series with the electroluminescent display element, the method comprising:

propagating a pulse or pulses through a shift register arrangement;

using a pulse from the shift register arrangement to allow pixel addressing control voltages to be applied to the pixels of a row during an addressing period;

using the shift register pulse or pulses to derive a drive voltage as input to [[for]] the interrupting means including a long emission time pulse for controlling the output of the display element, the long emission time pulse having a duration which can be varied up to substantially the full field period less the addressing period; and

applying the drive voltage for the interrupting means to the interrupting means after the pixel addressing period, the timing of the end of the pulse corresponding to the timing of an interrupt by the means for interrupting.

wherein the shift register arrangement and logic arrangement comprises first and second shift register devices, each having a pulse propagating through them, and logic means for deriving a signal having a long emission time pulse derived from the difference in timing of the pulses propagating through the first and second shift register devices, and

wherein said derived signal is synchronized to the frame time.